

## Appendix D

### FAA AIRPORT DESIGN STANDARDS SUMMARY

#### AIRPORT DESIGN AIRPLANE AND AIRPORT DATA – Visual Approach

Aircraft Approach Category .....	B
Airplane Design Group.....	I
Airplane wingspan .....	36 feet
Primary runway end approach visibility minimums are.....	visual exclusively
Other runway end approach visibility minimums are.....	visual exclusively
Airplane undercarriage width (1.15 x main gear track).....	12 feet
Airport elevation .....	253 feet

#### RUNWAY AND TAXIWAY WIDTH AND CLEARANCE STANDARD DIMENSIONS

Runway centerline to parallel runway centerline simultaneous operations when wake turbulence is not treated as a factor:

	Group/ARC
VFR operations with no intervening taxiway .....	700 feet
VFR operations with one intervening taxiway .....	700 feet
VFR operations with two intervening taxiways .....	700 feet
IFR approach and departure with approach to near threshold 2500 feet less 100 ft for each 500 ft of threshold stagger to a minimum of 1000 feet.	

Runway centerline to parallel runway centerline simultaneous operations when wake turbulence is treated as a factor:

VFR operations .....	2500 feet
IFR departures .....	2500 feet
IFR approach and departure with approach to near threshold .....	2500 feet
IFR approach and departure with approach to far threshold .....	2500 feet plus 100 feet for each 500 feet of threshold stagger
IFR approaches .....	3400 feet
	Airplane Group/ARC
Runway centerline to parallel taxiway/taxilane centerline.....	218.0 225 feet
Runway centerline to edge of aircraft parking.....	200.0 200 feet
Runway width .....	60 feet
Runway shoulder width .....	10 feet
Runway blast pad width .....	80 feet
Runway blast pad length .....	100 feet
Runway safety area width .....	120 feet

Runway safety area length beyond each runway end or stopway end, whichever is greater .....	240 feet
Runway object free area width .....	400 feet
Runway object free area length beyond each runway end or stopway end, whichever is greater .....	240 feet
Clearway width .....	500 feet
Stopway width .....	60 feet

## Obstacle free zone (OFZ):

Runway OFZ width.....	400 feet
Runway OFZ length beyond each runway end.....	200 feet
Inner-approach OFZ width.....	400 feet
Inner-approach OFZ length beyond approach light system .....	200 feet
Inner-approach OFZ slope from 200 feet beyond threshold .....	50:1
Inner-transitional OFZ slope .....	0:1

## Runway protection zone at the primary runway end:

Width 200 feet from runway end .....	500 feet
Width 1200 feet from runway end .....	700 feet
Length .....	1000 feet

## Runway protection zone at other runway end:

Width 200 feet from runway end .....	500 feet
Width 1200 feet from runway end .....	700 feet
Length .....	1000 feet

## Departure runway protection zone:

Width 200 feet from the far end of TORA .....	500 feet
Width 1200 feet from the far end of TORA .....	700 feet
Length .....	1000 feet

## Threshold surface at primary runway end:

Distance out from threshold to start of surface .....	0 feet
Width of surface at start of trapezoidal section .....	400 feet
Width of surface at end of trapezoidal section .....	1000 feet
Length of trapezoidal section .....	1500 feet
Length of rectangular section .....	8500 feet
Slope of surface .....	20:1

## Threshold surface at other runway end:

Distance out from threshold to start of surface .....	0 feet	
Width of surface at start of trapezoidal section .....	400 feet	
Width of surface at end of trapezoidal section .....	1000 feet	
Length of trapezoidal section.....	1500 feet	
Length of rectangular section.....	8500 feet	
Slope of surface .....	20:1	
	Airplane Group/ARC	
Taxiway centerline to parallel taxiway/taxilane centerline.....	53.2	69 feet
Taxiway centerline to fixed or movable object .....	35.2	44.5 feet
Taxilane centerline to parallel taxiway centerline .....	49.6	64 feet
Taxilane centerline to fixed or movable object .....	31.6	39.5 feet
Taxiway width .....	22.0	51.1 feet
Taxiway shoulder width .....		10 feet
Taxiway safety area width .....	36.0	49 feet
Taxiway object free area width .....	70.4	89 feet
Taxilane object free area width .....	63.2	79 feet
Taxiway edge safety margin .....		5 feet
Taxiway wingtip clearance .....	17.2	20 feet
Taxilane wingtip clearance .....	13.6	15 feet

REFERENCE: AC 150/5300-13, Airport Design, including Changes 1 through 4.

**AIRPORT AND RUNWAY DATA**

Airport elevation .....	253 feet
Mean daily maximum temperature of the hottest month .....	81.00 F.
Maximum difference in runway centerline elevation .....	0 feet
Length of haul for airplanes of more than 60,000 pounds .....	500 miles
Wet and slippery runways	

**RUNWAY LENGTHS RECOMMENDED FOR AIRPORT DESIGN**

Small airplanes with approach speeds of less than 30 knots .....	310 feet
Small airplanes with approach speeds of less than 50 knots .....	820 feet
Small airplanes with less than 10 passenger seats	
75 percent of these small airplanes .....	2490 feet
95 percent of these small airplanes .....	3040 feet
100 percent of these small airplanes .....	3610 feet
Small airplanes with 10 or more passenger seats .....	4150 feet

Large airplanes of 60,000 pounds or less

75 percent of these large airplanes at 60 percent useful load.....	5320 feet
75 percent of these large airplanes at 90 percent useful load.....	7000 feet
100 percent of these large airplanes at 60 percent useful load.....	5500 feet
100 percent of these large airplanes at 90 percent useful load.....	7630 feet

Airplanes of more than 60,000 pounds ..... Approximately 5100 feet

REFERENCE: Chapter 2 of AC 150/5325-4A, Runway Length Requirements for Airport Design, no Changes included.